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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/771,590

02/04/2004

Steven Yencheng Chen

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ESCHWEILER & ASSOCIATES, LLC  
NATIONAL CITY BANK BUILDING  
629 EUCLID AVE., SUITE 1000  
CLEVELAND, OH 44114

EXAMINER

ENG, DAVID Y

ART UNIT

PAPER NUMBER

2155

NOTIFICATION DATE

DELIVERY MODE

05/15/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Docketing@eschweilerlaw.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/771,590	<b>Applicant(s)</b> CHEN ET AL.	
	<b>Examiner</b> DAVID Y. ENG	<b>Art Unit</b> 2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/2/2008</u> .  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

The active claims are 1-23.

### **Related Application**

Applicants are reminded of the continuing responsibility to update the status of related applications on page 1 of the specification throughout the course of examination of the instant application.

### ***Claim Rejections - 35 USC § 112, second paragraph***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Function of the priority level is not clear. It appears that data is transferred between the host and the network according to the queue and not to their priority level. See claim 1 for example.

The following are vague and indefinite:

1. "a part of the data", see claim 1 3<sup>rd</sup> paragraph for example.
2. "a different part of the data" see the last paragraph of claim 1 for example.

3. "entries", see claims 1 and 12 for examples. It is not clear how entries are used for transferring data.

Further with respect to claims 12 and 20, function of the descriptor management system is not clear. The descriptor management system is recited for storing a plurality of priority levels. However, the priority level information stored in the descriptor management system is not recited being retrieved for providing priority function. It is not seen how merely storing priority level in a descriptor management system would render the queues to have priority levels.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 12, 13, 20, 21, 2 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Headrick (USP 5,724,358).

Headrick teaches:

#### **Claims 1, 12, 13, 20 and 21**

A method (abstract line 1) of transferring data between a host (any devices connected to any one of the nodes shown in Figure 1) and a network (the collective nodes 22 interconnected by the communication links 42 shown in Figure 1, WAN column 3, et seq. line 45), the method comprising:

providing a plurality of data transfer queues (priority sub-queues, abstract line 11) in a shared memory (the shared buffer, abstract line 6-7), the individual data transfer queues comprising a priority level, one or more descriptors (pointers, see line 9 abstract) indicating a memory buffer location within the shared memory, and one or more entries indicating a number of memory buffers located within the shared memory from which the host can read or write the data, the individual entries being associated with the data to be transferred between the host and the network, wherein a first data transfer queue has a higher priority level than a second data transfer queue;

retrieving a part of the data, to be transferred from the host to the network, from a memory buffer location within the shared memory indicated by the one or more descriptors;

transferring the data between the host and the network by transferring data associated with entries of the first data transfer queue (Column 3 line 53-54 describes that each node has a switch connected to a device. The switch has a plurality of priority sub-queues for transferring data in accordance with priority between the device and the network.) before transferring data associated with entries of the second data transfer queue, and

storing a different part of the data, transferred from the network to the host, in the memory buffer location within the shared memory indicated by the one or more descriptors.

***Claim 2***

See column 2 lines 23-25. Data in Headrick is routed on a per priority basis. In other words, all data in a higher priority queue is routed before data of low priority queue is transferred.

***Claim 11***

Each of the plurality of priority queues in Headrick is provided with data such that data is transferred from the host to the network in accordance with priority.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 14, 22 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Headrick (USP 5,724,358).

***Claim 3***

The “wherein clauses” of claim 3 consist of non-functional descriptive materials. Further, if the queues are in the form of receive descriptor rings, It is obvious that receive descriptor rings would be provided if queues are provided. Furthermore, it is well known that data is transferred in frames in packet network.

***Claim 14, 22***

If receive descriptor rings are the data to be forwarded to the host in accordance with priority, obviously the receive descriptors rings are transmitted through the priority queues so that the receive descriptor rings are transmitted in accordance with their priority.

***Claims 15***

In Headrick, data items are read and transmitted in accordance with their assigned priority between the host and the network via priority queues. Whether the data items are labeled as descriptors, receive descriptor rings, transmit descriptor rings or differently are immaterial as far as the transmitting is concern.

**Response**

Applicants' remarks are not understood. Whether mapping is employed in Headrick is immaterial. The Examiner did not rely on any mapping in Headrick. Headrick clearly teaching employing queues (priority sub-queues in Headrick) for storing pointers (descriptors) for addressing the memory buffers in a shared memory.

**Allowable Subject matter**

***Claims 4-10, 16-19, 23***

Claims 4-10, 16-19 and 23 appear to contain allowable subject matter. However, for the reasons set forth in the Section 112 Rejection, no statement can be made as to whether they are allowable.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID Y. ENG whose telephone number is 571-272-3984. The examiner can normally be reached on M-F from 8AM to 3PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, SALEH NAJJAR, can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/DAVID Y. ENG/

Primary Examiner, Art Unit 2155